

21



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,197	04/04/2005	Francis Edward Charles Nurse	101709.56096US	9590

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CROWELL & MORING LLP  
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EXAMINER

JOHNSON, STEPHEN

ART UNIT PAPER NUMBER

3641

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/530,197

Applicant(s)

NURSE, FRANCIS EDWARD  
CHARLES

Examiner

Stephen M. Johnson

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3641

1. The drawings are objected to because boxes 32, 34, 36, and 38 require descriptive labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7 and 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2 222 046 A (Gropp).

Gropp discloses a method of controlling the operation of a missile launcher comprising the steps of:

Art Unit: 3641

- |   |   |
|---|---|
| a) firing a missile from a missile launcher;                        | 1 (see fig. 1)                            |
| b) tracking the trajectory of the fired missile;                    | page 3, lines 12-20                       |
| c) calculating a predicted point of impact;                         | page 2, lines 19-24;<br>page 4, lines 1-3 |
| d) feeding back and applying the correction prior to<br>impact; and | page 4, lines 1-5                         |
| e) a tracking radar system.   | see abstract                              |

4. Claims 1-5 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2 107 835 A (Vauchy).

Vauchy discloses a method of controlling the operation of a missile launcher comprising the steps of:

- |   |                        |
|---|------------------------|
| a) firing a missile from a missile launcher;                        | page 1, lines 40-44    |
| b) tracking the trajectory of the fired missile;                    | page 1, lines 109-115  |
| c) calculating a predicted point of impact;                         | page 1, lines 118-122; |
| d) feeding back and applying the correction prior to<br>impact; and | page 3, lines 83-128;  |
| e) a tracking system.   | 2, 4, 11               |

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3641

6. Claims 6-7, 11-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vauchy in view of Maughan et al. (329).

Vauchy applies as previously recited. However, undisclosed is a tracking system that is a radar tracking system. Maughan et al. teach a tracking system that is a radar tracking system (see abstract). Applicant is substituting one equivalent tracking system for another in an analogous art setting. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Maughan et al. to the Vauchy control system and associated method and have a control system and associated method with a different type of tracking system.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haglund (672) disclose another state of the art method for controlling the trajectory of a missile.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877 and whose e-mail address is ([Stephen.Johnson@uspto.gov](mailto:Stephen.Johnson@uspto.gov)). The examiner can normally be reached on Tuesday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The Central FAX phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

Application/Control Number: 10/530,197

Page 5

Art Unit: 3641



STEPHEN M. JOHNSON  
PRIMARY EXAMINER

Stephen M. Johnson  
Primary Examiner  
Art Unit 3641

SMJ

March 22, 2006